

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) A circuit arrangement for rapidly switching ~~a load, in particular~~ an inductive load, said arrangement comprising:

- a switching transistor implemented as an N-channel MOS power transistor and connected as a high-side switch for connecting a load with a supply voltage,

- controllable switching means for applying a potential exceeding the voltage of the supply voltage source to ~~[[the]]~~ a gate electrode of the switching transistor, said switching means ~~incorporate~~ incorporating at least a first switching-means transistor whose collector current flows at least in part to the gate electrode of the switching transistor during the ON state, said first switching-means transistor is connected as a current source, said first switching-means transistor is part of a current mirror circuit, wherein the current mirror circuit incorporates a first current mirror resistor and a second current mirror resistor each connected to a low voltage source, ~~[[and]]~~ the first current mirror resistor being connected to the base electrode and the second current mirror resistor being connected to the emitter electrode of the first switching-means transistor.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein the first switching-means transistor is a pnp transistor.

5. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein the collector current of the first switching-means transistor flows to the gate electrode of the switching transistor via a diode connected in the flow direction.

6. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein the ratio of the resistance values of the first current mirror resistor and the second current mirror resistor corresponds to approximately 100:1.

7. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein an input current of the current mirror circuit is controllable by means of a second switching-means transistor connected as a current source and clocked by a control signal.

8. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 7, wherein the input current of the current mirror flows to the latter via an RC element comprising an RC element resistor and a parallel-connected RC element capacitor.

9. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 8, wherein the time constant of the RC element is so designed that the RC element-capacitor is not charged significantly during the turn-on time of the switching transistor, but virtually completely charged during its ON time.

10. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein the current mirror circuit further includes a diode connected in series with the first current mirror resistor ~~[[in]]~~ and in the flow direction of the current mirror input current.

11. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein a bootstrap capacitor is provided which is connected to the low voltage source and to the source electrode of the switching transistor.

12. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein there is provided a bootstrap diode oriented in the forward direction for coupling the voltage of the low voltage source into the current mirror circuit.

13. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, wherein the low voltage source has an auxiliary voltage source sitting on top of the potential of the supply voltage.

14. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 1, ~~wherein~~ **further comprising** a second switching-means transistor ~~is provided~~ whose emitter electrode is connected to the gate electrode of the switching transistor and whose collector electrode is connected via a leakage resistor to the source electrode of the switching transistor.

15. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 14, **further comprising a third switching means transistor** wherein the base electrode of the third switching-means transistor is connected via a leakage resistor to the source electrode of the switching transistor.

16. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 14, wherein the ~~third~~ **second** switching-means transistor is a pnp transistor.

17. (Currently Amended) ~~[[The]]~~ A circuit arrangement according to Claim 5, ~~wherein~~ **further comprising** a second switching-means transistor ~~is provided~~ whose emitter electrode is connected to the gate electrode of the switching transistor and whose collector

electrode is connected via a leakage resistor to the source electrode of the switching transistor.

18. (Currently Amended) A method for rapidly switching a load, in particular an inductive load, comprising the steps of:

- connecting a load via a switching transistor implemented as an N-channel MOS power transistor with a supply voltage, **and**

- applying a potential exceeding the voltage of the supply voltage source to the gate electrode of the switching transistor through switching means, wherein said switching means incorporate a first, ~~[[and]]~~ second, **and third** switching-means transistors, said first switching-means transistor having a collector current flowing at least in part to the gate electrode of the switching transistor during the ON state~~[[,]]~~ ~~said first switching-means transistor~~ **and** connected as a current source ~~[[is]]~~ **as** part of a current mirror circuit, **said third switching-means transistor emitter electrode connected to the gate electrode of the switching transistor and collector electrode connected via a leakage resistor to the source electrode of the switching transistor.**

19. (Original) The method according to Claim 18, wherein the collector current of the first switching-means transistor flows to the gate electrode of the switching transistor via a diode connected in the flow direction.

20. (Canceled)

21. (Canceled)

22. (Currently Amended) A circuit arrangement for rapidly switching a load, said arrangement comprising:

a switching transistor implemented as a N-channel MOS power transistor and connected as a high-side switch for connecting a load with a supply voltage,

a switching[[[-]] means for applying a potential exceeding the voltage of the supply voltage source to the gate electrode of the switching transistor, said switching[[[-]] means incorporating a first switching means transistor whose collector current flows in part to the gate electrode of the switching transistor during the ON state, the first switching[[[-]] means transistor connected as a current source, and a second switching[[[-]] means transistor whose emitter electrode is connected to the gate electrode of the switching transistor and whose collector electrode is connected via a leakage resistor to the source electrode of the switching transistor, wherein said second switching[[[-]] means transistor is a pnp transistor.